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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,065	11/19/2003	Vikram Rai	4-2	7231

7590 08/01/2007

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
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EXAMINER	
CHO, UN C	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
08/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/717,065	RAI ET AL.	
	Examiner	Art Unit	
	Un C. Cho	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (US 2001/0021180 A1).

Regarding claim 1, Lee discloses a method at a base station in a CDMA wireless network that transmits data bursts on a high-speed forward channel, the method comprising the steps of: providing at least one permanent virtual pipe on the high-speed forward channel for transmission of the data bursts (providing a supplemental channel (SCH) for high-speed transmission of data; Lee: Page 3, Paragraph 0048, lines 1 – 9); scheduling transmission of burst segments of the data bursts on the at least one permanent virtual pipe in a round-robin manner among different data bursts (scheduling transmission on the SCH); and transmitting the burst segments on the at least one virtual pipe in accordance with the scheduling (transmitting on the SCH based on scheduling) (Lee: Page 3, Paragraph 0048, line 14 through Page 4, Paragraph 0051, line 5).

Regarding claim 2, Lee as applied above discloses provisioning predetermined channel resources to the at least one virtual pipe (Lee: Page 4, Paragraph 0052, lines 13 – 24).

Regarding claim 8, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 10, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 6, 7, 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of the admitted prior art (hereinafter APA).

Regarding claim 3, Lee as applied above does not specifically discloses wherein the predetermined channel resources comprises a predetermined number of contiguous Walsh codes and a predetermined amount of contiguous real estate on the base station's CDMA ASIC. In an analogous art, the APA clearly discloses the claimed limitation on Page 3, lines 4 – 10. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of the admitted prior art to the

system of Lee in order to provide basic building blocks that is necessary to transmit data at high speeds.

Regarding claim 6, Lee in view of the APA as applied above discloses wherein the base station operates in accordance with CDMA2000 standards and the virtual pipes are provided at widths chosen from among 19.2 kbps, 38.4 kbps, 76.8 kbps and 153.6 kbps (3G CDMA 2000 system supports data rates of 19.2; 38.4; 76.8 and 153.6 kbps; the APA: Page 1, lines 14 – 18).

Regarding claim 7, Lee in view of the APA as applied above discloses transmitting an ESCAM a predetermined time interval before transmitting a burst segment, the ESCAM providing information for receiving the burst segment (ESCAM is defined in the IS-2000 standard; the APA: Page 2, lines 13 – 22).

Regarding claim 11, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 14, the claim is interpreted and rejected for the same reason as set forth in claim 6.

Regarding claim 15, the claim is interpreted and rejected for the same reason as set forth in claim 7.

5. Claims 4, 5, 9, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of the APA as applied to claim 1 above, and further in view of Sindhushayana et al. (US 2006/0114910 A1).

Regarding claim 4, Lee in view of the APA as applied above does not specifically disclose wherein the at least one permanent virtual pipe comprises a plurality of different width virtual pipes, at least one of the plurality of virtual pipes being wider than another of the virtual pipes, at least one burst segment of each data burst being scheduled for transmission on the widest virtual pipe. In an analogous art, Sindhushayana remedies the deficiencies of Lee in view of the APA by disclosing such limitation on Page 4, Paragraph 0046, line 1 through Page 5, Paragraph 0051, line 5 and Table I, whereas in an HDR system forward link data rates can vary from 38.4 kbps to 2.456 Mbps and the system of Sindhushayana discloses that the initial data transmission can be performed at a high data rate and ramped down as needed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Sindhushayana to the modified system of Lee in view of the APA in order to provide enhanced data throughput of a wireless communication system based on the use of a scheduler unit which can be configured to schedule a multi-slot packet transmission to a remote station in accordance with a scheduling algorithm.

Regarding claim 5, Lee in view of the APA and further in view of Sindhushayana as applied above discloses scheduling transmission of the burst segments of a data burst amongst the different width virtual pipes in a round robin manner (Sindhushayana: Table I and Page 5, Paragraph 0051, lines 1 – 5).

Regarding claim 9, Lee in view of the APA and further in view of Sindhushayana as applied above discloses a burst segment control means associated with the at least one permanent virtual pipe for storing when each burst segment is scheduled for transmission, the transmitting means transmitting a burst segment in response to a signal from said burst segment control means to transmit the burst when it is scheduled (Sindhushayana: Page 4, Paragraph 0044, line 1 through Page 5, Paragraph 0051, line 5).

Regarding claim 12, the claim is interpreted and rejected for the same reason as set forth in claim 4.

Regarding claim 13, the claim is interpreted and rejected for the same reason as set forth in claim 5.

Response to Arguments

6. Applicant's arguments filed on 5/02/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the reference by Lee fails to teach "providing at least one permanent virtual pipe on the high-speed forward channel for transmission of the data bursts". The examiner respectfully disagrees with the arguments presented by the applicant. Lee clearly discloses the above mentioned limitation on Page 3, Paragraph 0048, line 1 – 28, whereas in the CDMA-2000 system there are two types of dedicated physical channels of which the Fundamental Channel transports dedicated data at rates of 9.6Kbps and

14.4Kbps, in contrast, the Supplemental Channel is allocated dynamically to meet required higher data rates for packet data services. These two dedicated channels are consistent and essential channels for providing performance data traffic. Lee discloses an SCH channel for communicating the packet data at the high data rate. The examiner's interpretation of permanent virtual pipe would be the SCH channel itself that is used as a conduit for high-speed data communication channel.

Therefore, the office action mailed on 2/02/2007 stands.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C. Cho whose telephone number is (571) 272-7919. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Un C Cho
Examiner
Art Unit 2617

7/26/07

GEORGE ENG
SUPERVISORY PATENT EXAMINER